Idaho Transportation Department
Research Program

Request for Qualifications and Interest
For FY 2011 Research Projects

October 13, 2010

Introduction

The Idaho Transportation Department (ITD) Research Program is currently soliciting proposals from qualified research teams at public colleges and universities who are interested in performing research in the following areas:

Solicitation #	Project Title
2011-01	Evaluating the Effectiveness of Winter Chemicals at Reducing Crashes in Idaho
2011-02	Review of Non-nuclear Density Gauges as a Possible Replacement for ITD's Current Nuclear Density Gauges
2011-03	Media Messages and Tools to Reduce Fatalities and Serious Injuries from Single Vehicle Run-off-the-Road Crashes
2011-04	Defining and Quantifying Rural Congestion (limited to Idaho public universities)

Proposal Format

Each proposal submitted must address a single project from the solicitation list above. Research teams interested in being considered for more than one project must develop separate proposals for each project.

Proposals submitted in response to this RFQ should not exceed 15 pages and must be organized as follows:

1. **Cover Page** – Each proposal should include a cover page containing the following information:
    a. Project Title (from RFQ)
    b. Solicitation # (from RFQ)
    c. "Submitted by" section including name, institution, address, phone, fax #, and e-mail address
    d. "Submitted to" section indicating the proposal is being submitted to the Idaho Transportation Department, Research Program, P.O. Box 7129, Boise, ID 83707-1129
    e. Proposal Date

2. **Problem Statement** – This section of the proposal should concisely express your understanding of the problem(s) presented in the solicitation. Do not just restate language in the solicitation, but instead articulate your own understanding of, and insight into, the problem(s).

3. **Objectives** – Present a listing of the key objectives of the research project. Describe how each of the objectives will be achieved through the research. Identify any obstacles you see to achieving the objectives and how you would propose overcoming them.

4. **Research Approach/Work Plan** – Each proposal should describe the work that will be performed to fulfill the project objectives. Include each of the tasks listed in the solicitation and describe in

detail how each task will be performed. Identify any additional tasks you feel are needed and explain any deviations from the tasks listed in the solicitation.

The research plan should be complete and logically organized. It should clearly articulate the researcher's approach to the problem and how the work done will contribute to accomplishment of the project objectives. The proposal should include discussion of applicable principles/theories, the type and range of data needed, the data analysis methods to be employed, and how possible recommendations will be identified or developed.

5. **Communications Plan** – Ongoing communication between the research team and ITD staff is critical to the success of projects. The proposal must include a description of the steps researchers will take to ensure regular communication occurs with ITD's Research Program staff, Project Manager, and Technical Advisory Committee throughout the project.

6. **Project Deliverables** – Project deliverables can vary from project to project and may include reports, computer programs and databases, manuals, training materials, etc. Unless otherwise specified, always include the following items among the project deliverables:
    a. Monthly project summary reports – Researchers performing work for ITD will be required to submit brief monthly status reports to the department. A copy of the standard ITD Form 771 is available in the "Resources for Researchers" section of the Research Program website (http://itd.idaho.gov/planning/research/).
    b. Report outline – Prior to report writing, researchers should submit a detailed report outline to Research Program staff and ITD's Project Manager. The outline should illustrate the report organization and provide information about the researchers' key findings, conclusions, and recommendations in sufficient detail to communicate the report message.
    c. Draft final report – A written report is required for each ITD supported research project. Prior to submitting a draft report to ITD, the draft report should be reviewed by a qualified peer reviewer approved by the department and be edited to ensure the report is clear, concise, and conforms with requirements in the ITD Research Program's Report Writing Guidebook.
    d. Final report – Final reports are published on ITD's website and distributed to various libraries and information services (e.g. FHWA Library, the National Transportation Library (NTL), the Transportation Research Information System (TRIS), etc.). The final report should be professionally done and comparable in quality to a published journal article or dissertation. Reports should also be written to be understandable to both the technical staff involved in the project (engineers, planners, etc.) and other likely readers (department management, board members, legislators, etc.).

7. **Time Schedule** – Proposals should identify the estimated start and completion dates for the project, as well as the dates for key deliverables and significant project milestones. Each proposal should include a Gantt chart depicting the schedule for completing the major research

tasks. The schedule should indicate the number of months allocated to each task. A sample of a simple task schedule is provided in Table 1.

Table 1
Sample Task Time Schedule/Gantt Chart

Task	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
1 Literature Review												
2 Field Survey												
3 Lab Study												
4 Develop Database												
5 Develop Recommendations												
6 Prepare Report Outline												
7 Prepare Draft Final Report												
8 Peer Review of Draft Report												
9 Editorial Review of Draft Report												
10 Make Peer Review/Editorial Changes and Submit to ITD												
11 ITD Initial Review of Report Draft												
12 Revise Draft and Resubmit for Final Review												
13 Make Any Final Changes and Submit Final Report												

The report review process can be lengthy. Reports are reviewed by ITD Project Managers, Technical Advisory Committee members, and by FHWA staff. These are busy individuals and they'll need time to fit the review into their schedules. As a result, please allow 30 days for review of the initial draft, 30 days for researchers to make needed changes, and 30 days for final review and approval of the report.

Please be sure to build sufficient time into your time schedule to complete the work outlined in your proposal. It is very important to ITD's Research Program that projects be completed on time. As a result, no time extensions should be anticipated.

8. **Staffing –** Each proposal must identify the principal investigator(s) and other faculty/staff who would be involved in the project, and specify the extent to which graduate and/or undergraduate students would be used in the work.

   This section of the proposal should describe the role each team member would play in the project, and explain how team members' past academic, professional, and research experience relate to the work they will perform.

   Proposals must also identify the individuals who will perform quality control work on the project, including:

   a. An independent peer reviewer with sufficient expertise to assess the adequacy of the work performed and the conclusions reached by the project team, and
   b. A report editor responsible for ensuring project reports are clearly and concisely written, and are prepared in accordance with ITD Research Program guidelines.

Proposals must include a detailed breakdown of each team member's involvement in each of the major tasks. Table 2 provides an example of how this can to be done.

Table 2
Sample Project Personnel Hours Distribution

Name of Person	Role in Study	Task (Hours)													
		1	2	3	4	5	6	7	8	9	10	11	12	13	Total
Professor A	Principal Investigator	10	40		40	40	40	40			20	20	10	10	270
Professor B	Co-Principal Investigator	10		40	40	40	40	40			20	20	10	10	270
Graduate Student A	Field Testing	25	200		100	40	50	100			40	20	10	10	595
Graduate Student B	Analysis	25		200	100	40	50	100			40	20	10	10	595
Undergraduate Student A	Field Testing		60	60	100										220
Undergraduate Student A	Analysis		60	60	100										220
Peer Reviewer A	Report Editing								40						40
Report Editor	Report Editing									40					40

Proposals also must provide information about other commitments the principal investigator(s) and research team will have during the course of the project. This information must be sufficiently detailed to allow assessment of the researchers' ability to complete the work.

9. **Facilities and Equipment** – The proposal should describe the facilities and equipment available to the research team to complete the project, and any facilities or equipment that are necessary to complete the project should be discussed. Please also identify any equipment that is needed, but not currently on hand. If additional equipment is to be purchased with project funds, include it in the budget estimate. Equipment purchased with project funds typically becomes the property of ITD when the project is completed.

10. **Required ITD Involvement** – The proposal should include a discussion of any assistance required from the Idaho Transportation Department. This could include items such as:

    a. Identification of test locations
    b. Data collection
    c. Access to ITD records or databases
    d. Construction
    e. Highway maintenance
    f. Sampling
    g. Materials testing
    h. Interviews
    i. Traffic control

11. **Budget** – Provide a detailed quotation of the costs for the work outlined in your proposal as illustrated in Table 3. The total budget for the project must not exceed the maximum dollar figure in the "Estimated Budget Range" section of the project solicitation. This range is ITD's estimate of the level of funding necessary to complete the work. Proposers should set the scope and depth of the study accordingly. Due to budget constraints additional funding for projects is highly unlikely. As a result, no budget extensions should be anticipated.

Table 3
Sample Proposed Project Budget

	Item	Budget
Salaries & Benefits	Faculty Salaries	$
	Graduate Salaries	$
	Hourly Undergrad Wages	$
	Faculty Fringe Benefits	$
	Graduate Fringe Benefits	$
	Hourly Undergrad Benefits	$
	Total Salaries & Benefits	$
Other Costs	Equipment	$
	In-state Travel	$
	Out-of-state Travel	$
	Graduate Student Fees	$
	Graduate Student Insurance	$
	Subcontractor Expenses	$
	Peer Review Costs	$
	Editor Costs	$
	Other Expenses	$
	Total Other Costs	$
	Total Direct Costs	$
	Total Indirect Costs	$
	Total Proposed Budget for Project	$

If the proposal includes efforts by subcontractors, please identify each subcontractor, their role and the expected costs for their services. Include subcontracting expenses as a line item in the proposal. Also include peer reviewer and editor costs as separate line items in your budget.

Out-of state travel, which is defined as travel between the researcher's base and destinations other than Idaho, must be identified separately. All out-of-state travel must be approved in advance using the ITD form 00632 provided in the "Resources for Researchers" section of the Research Program website (http://itd.idaho.gov/planning/research/).

Indirect costs listed in the budget must be substantiated should your proposal be accepted. Prior to the first progress payment, the proposer must submit documentation supporting the bases and rates used

to calculate indirect costs. Examples of indirect cost schedule formats can be found in Chapter 9 of the *AASHTO Uniform Audit and Accounting Guide*.

Contacts/Information

Specific questions about the project solicitations should be addressed to ITD's Research Program staff. All questions must be submitted in writing and may be submitted via e-mail to: research@itd.idaho.gov. No phone calls please. The deadline for submitting questions is **November 8, 2010** at 5:00 p.m. Mountain Time.

Responses to questions received will be posted on the Research Program website within four (4) business days (http://itd.idaho.gov/planning/research/proposals).

Proposal Submission

All proposals must be received no later than **November 17, 2010** at 5:00 P.M. Mountain Time. Proposals can be submitted by mail, e-mail, or facsimile. Submit proposals to:

Idaho Transportation Department
Research Program, Planning Division
3311 W. State St.
P.O. Box 7129
Boise, ID 83707-1129
research@itd.idaho.gov
(208) 334-4432 (Fax)

Proposals submitted become the property of ITD. The Department has the right to use all information presented in any proposal unless it is annotated as being proprietary. ITD considers all information in proposals to be privileged and reserves the right to maintain its confidentiality. Selection or rejection of a proposal does not affect these rights.

Selection Procedures

Proposals will be reviewed by Research Program staff and project Technical Advisory Committee members. Evaluation of the proposals will focus on 1) the experience and qualifications of the research team, 2) the research approach proposed, and 3) cost. The evaluation criteria will be weighted as follows:

Evaluation Criteria	Points Possible
Experience and Qualifications	400
Research Approach Proposed	400
Cost	200
Total	**1,000**

The responsive and responsible proposer with the lowest total cost for the project will receive 200 points. All other responsive and responsible quotations will receive a portion of the 200 available cost points calculated as follows:

> The lowest cost will be divided by the next lowest cost, and then multiplied by the total number of available points (200). For example:
>
> | | Proposer A | Proposer B |
> |---|---|---|
> | Price Quote | $70,000 | $90,000 |
>
> Proposer A would receive 200 points for having the lowest cost quote.
> Proposer B would receive 156 points based on the following formula:
>
> $70,000/$90,000 = 0.78 x 200 = 156

The scores from the technical evaluation and cost quotation evaluation will be summed, and the proposals will by ranked according to their total scores. The contract will be awarded to the responsive and responsible proposer with the highest total score.

Review of proposals is expected to be completed within two to three weeks following the submission deadline. It is anticipated that proposers will be notified of project selections by **December 10, 2010**.

ITD reserves the right to reject any and all proposals submitted. It may negotiate with the proposer to address specific weaknesses in the proposal submitted.